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ABSTRACT

The instructor's manual examines ways to help regular class teachers develop instruction based on individualized educational programs (IEPs) developed for disabled students. Procedures are described for the workshop leader to discuss training objectives, assumptions concerning the need for training, and a brief review of research. The issue of content vs behavior is addressed, the determination of strengths and weaknesses considered, and the interactive model is introduced. A large part of the document is composed of a paper by J. Cowley, "Content or Behavior--An Issue in the Assessment of Specific Learning Disabilities," which reviews research on specific assessment instruments. Also appended is "IEPs--The State of the Art--1978" by S. Schenck and W. Levy. (CL)

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Manchester Community College Inservice Training Project

YEAR 1980-1981

PROJECT: LEAST RESTRICTIVE ENVIRONMENT:
MCC INSERVICE TRAINING FOR REGULAR CLASSROOM TEACHERS

"Linking Regular Classroom Instruction To The Individual Educational Plan"

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INSTRUCTOR'S MANUAL

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WORKSHOP OUTLINE

(Suggested Length 2½ hours)

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LINKING PSYCHOEDUCATIONAL DATA TO CLASSROOM INSTRUCTION

I. Instructor's Script

Preparation: Familiarize yourself with:

a. The contents of this manual.

b. The structure of the participant's manual.

c. The article, "Content Or Behavior," by Cawley, (1977). Attached.

d. The article, "IEP'S The State Of The Art - 1978," by Schenck and Levy, (1979), Attached.

e. Utilize the transparency masters in the preparation of your overhead visuals.

f. You will need index cards.

--------INTRODUCTION----------

Introduce yourself, giving your background, etc., Have each of the participants introduce themselves and identify their current teaching status. You might wish to have them identify their needs relative to this workshop. Have folded index cards ready. Participants will write their names on these cards and produce identification table place cards.

2. PURPOSE - Describe the purpose of this workshop as the introduction of a system which will allow the direct representation of identified behavioral strengths. The system will also allow these strengths to be linked to classroom instruction. Give examples of a NON-LINKAGE between behavioral weaknesses and instruction. For example: A student who cannot express self graphically who is requested to take an essay science test and fails it. The question to be considered is:

"ARE WE MEASURING SCIENCE OR WRITING ABILITY"

3. PRESENT WORKSHOP OBJECTIVES

Expand the objectives as needed after reviewing these orally. Make sure that participants know what to expect from the workshop. The workshop objectives are given in the participants' manual.

II. WORKSHOP OBJECTIVES

A. Gain competence with a system of communication that will provide a linkage between psychoeducational assessment, instruction and curricula material.

B. Become familiar with research surrounding the linkage of psychoeducational data to classroom instruction.

C. Be able to organize diagnostic data into a display of student strengths and weaknesses.

D. Be able to identify the behaviors associated with the assessed strengths and weaknesses.

E. Appreciate the difference between instructional content and instructional behaviors.

F. Understand an interactive model of presentation and response behavior.

G. Represent the identified behavioral strengths in an efficient format on the Individual Educational Plan (IEP).

H. Participate in the assessment of the workshop.

III. ADMINISTER PRETEST

Directions: Here are five true-false questions. Please circle the answer (t-f) you feel is appropriate. Place your name on the paper since at the end of the workshop a posttest will be administered.

PRE-TEST - is found in participants' handbook. Make a transparency of the pretest.

REVIEW PRETEST AS AN INTRODUCTION TO STATEMENT OF NEED

1. An Individual Educational Plan is required for all handicapped children - (FALSE). It is required only for those who are identified and are receiving services.

2. All handicapped children are to be mainstreamed. (FALSE)

All handicapped children are to be in the LEAST RESTRICTIVE ENVIRONMENT. When the term (LRE) was first issued by the judge in the Partlow decision (WYLES vs STICKNEY, 1972) it was not further explained. It came to be equated with the "normalization" principle, i.e., a child is to be educated in the most normal situation possible.

Mainstreaming is an administrative alternative. It is a method of assuring maximum utilization of the services of the special education teacher.

Mainstreaming and LRE do not mean the same. It is conceivable that on occasion they could be mutually exclusive.

Use Transparency - Mainstreaming versus LRE

The term "MAINSTREAMING" is not found within Public Law 94-142. The term "Least Restrictive Environment" is found within that document.

EXAMPLE: A child who cannot read and who is placed in a science class which requires reading both the test and the text is being mainstreamed into a very restrictive environment.

3. All handicapped children are to be placed into the least restrictive environment. (TRUE).

This is explained above.

4. Mainstreaming and Least Restrictive Environment mean the same. FALSE)

Again this is explained above.

5. Modification of instruction in the regular classroom must be described on the Individual Educational Plan. (TRUE).

Why should we describe these on the IEP? Develop a parallel between the issue of the six hour retardate and the LD student. That is, te retardate is handicapped during the six hours of school every day. The LD sudent is handicapped during the 5½ hours per day that he/she is not within the resource room. (This may introduce the issue of the 5½ hour LD student) If no allowances are made for alternate instruction/curriculum methodologies for the regular classroom the child is being placed into a very restrictive environment.

The regular classroom should be modified and that modification should be documented.

THEREFORE: The purpose of this workshop is to offer a system which will allow the regular classroom teacher a defensible and traceable link between psychoeducational diagnostics and instruction.

IV. STATEMENT OF NEED

Psychoeducational diagnosis has been the realm of specialists.

Assumptions preceeding the statement of need:

A. The classroom teacher does not have the skills necessary to translate the Psychoeducational strengths into instructional options.

B. The regular classroom teacher does not have the time to rewrite all of the curriculum materials for the handicapped student in the classroom.

This, if done, usually amounts to a "watering down" of the curriculum. The students, however, can do the requisite behaviors.

C. The classroom teacher does not have the time available to provide a detailed listing of the methodologies to be utilized with the handicapped student. Furthermore, on what basis are these methodologies determined?

A short-hand method of describing the methodologies to be utilized by the regular classroom teacher is needed.

Are the methodologies defensible?

These are the purposes of the workshop:

THEREFORE: There is a clear need for a methodology which will:

- provide a traceable linkage between identified strengths and classroom instructional behaviors.
- provide an instructional option which does not require a revision of the classroom curriculum.
- provide an instructional option which does not require additional time for regular classroom teacher.

QUESTIONS FOR THE STATEMENT OF NEED:

You may ask, then answer. Make transparency-statement of need-

(This is also found within the participants manual)

A. Why are the handicapped mainstreamed?

B. Is there a difference between Mainstreaming and Least Restrictive Environment?

C. Why do we need the Individual Educational Plan?

D. Why document regular classroom activities on the Individual Educational Plan?

E. What is a traceable linkage?

This provides a communication system which can be understood by parents, administrators, and teachers.

Explain the need for a defensible positon and a logical relationship between the student's strengths and the teacher's instructional behaviors. By being traceable, it should operate both ways, e.g. from student strengths to instruction and from instruction backwards through psychoeducational assessed student strengths.

V. REVIEW OF RESEARCH:

Familiarize yourself with "Prescriptive Programming in the Mainstream," by Virginia Laycock in IMPLEMENTING LEARNING IN THE LEAST RESTRICTIVE ENVIRONMENT, (Baltimore: University Park Press, 1980).

You should also include reference to Schencks, (1979) work on Individual Educational Plan.

A suggester outline follows;

I. The Diagnostic Process

A. Measuring present performance levels

1. Intelligence Testing
   a. measures general level of functioning
   b. group tests used as screening devices
   c. individual tests
      1. Wechsler Intelligence Scale
      2. Stanford-Binet Intelligence Scale

2. Performance Levels in other areas
   a. tests
      1. achievement-samples from various areas
      2. diagnostic-focus on single subject
   b. behavior samples
   c. developmental checklist
   d. rating scales

B. Identifying Skills And Behavior Of Concern

1. Criterion-referenced testing
   a. pinpoint exact strengths and weaknesses
   b. individual performance measured against mastery standard
   c. instructionally relevant

2. Diagnostic observation
   a. observation compliments testing
   b. daily journals, brief notes
   c. narrative recording-behavior sequence
   d. frequency counting-how often behavior occurs
   e. collect baseline data

3. Describing individual learning styles
   a. attention control
      1. ability to focus and sustain attention to task
      2. look at process, check attending behaviors
   b. modality preference
      1. determining best channel for learning and retaining information.
         a. visually
         b. orally
         c. tactical-kinesthetic
      2. trial lessons help diagnose preference
   c. levels of processing
      1. concrete-sensory and perceptive information
      2. abstract-symbols in verbal and graphic form
   d. reflection-impulsivity
      1. reflective individuals-pause and evaluate before a decision.
      2. impulsive individuals-less cautious, respond more quickly.
   e. grouping preference
      1. special children need structure and supervision
      2. special children need teacher directed, small group one-to-one.

f. reinforcement
   1. strengths, maintains behavior
   2. common-attention, praise, knowledge, of results
   3. special children need more personal, powerful [illegible] reinforcers, i.e. tokens

II. Target Objectives

A. Task Analysis

1. Define target skills in behavioral terms
   a. observable skill learner will perform
   b. "to recite alphabet"
   c. "what is it that the student must do?"

2. Specify prerequisites for learning
   a. entry behavior: what learner must already know
   b. current functioning

3. Identify steps leading to performance of skills
   a. difficult, time-consuming
   b. component skills, implicit and explicit
   c. analyze task
      1. watch a master perform
      2. perform task
      3. work backward from terminal behavior
      4. brainstorm
      5. approximate conditions for final performance
      6. list discrete behaviors representing attainment of goa-

4. Check for appropriate sequence and comprehensiveness
   a. note developmental sequence
   b. steps flow in logical order, simple to complex
   c. check steps for approximate difficulty

B. Adapting objectives in context areas
1. Define knowledge and performance expectations
   a. desired outcome of teaching unit
   b. how student demonstrate knowledge form of assignment

2. Demonstration of Knowledge
   a. through different modes-orally, written, etc.
   b. different levels of complexity-recall vs. recognition

3. Students experiencing difficulty
   a. check appropriateness of objective
   b. establish specific objectives for student's level
      1. grade level objectives too difficult
      2. adjust objectives for instructional level
   c. modify performance requirements-take an oral rather than written test.

III. Teaching Strategies

A. Time Schedule

1. Plan subtests for most productive periods of day
   a. adjust daily schedule to avoid slumps
   b. avoid demanding work at child's fidgety, hungry, tired periods
   c. look for patterns of productive periods

2. Duration of lesson
   a. change for handicapped child
      1. grant additonal time
      2. complete at home
   b. abbreviate tasks for distractible child
      1. break-up into several brief sessions
      2. intersperce with other activities

B. Grouping

1. Small group instruction
   a. instructional level-grade equivalent
   b. skill development-placed according to work on objectives
   c. hetrogeneous skill group-content areas, by interest

2. Individual Instruction
   a. reserved for instructional interactions that cannot be accomplished in any other mode
   b. student working on different assignment than rest of class
   c. perform while other students are working independently

3. Peer tutoring-supplement to teacher-directed lessons
   a. tutorial system
      1. select participants
      2. delineate responsibilities
      3. train tutors
      4. make arrangements
      5. initiate tutoring
      6. monitor and evalate
   b. desire to participate primary criterion

C. Physical setting

1. Location of student in classroom
   a. do not accentuate differences
   b. least restrictive applies to classroom environment

2. Modifications of classroom environment
   a. flexible classroom space
      1. activity enters
      2. study offices
   b. children with visual or auditory deficits, distractible-rear, front

D. Instructional mode

1. Input methods
   a. construct mode-concrete demonstrations
   b. present mode-visual aids, pictorial representations
   c. state mode-verbal explanation
   d. graphic/symbolic mode-printed word and symbols

2. Modality preference
   a. present materials to intact perceptual channel
   b. combination of input methods best

3. Level of abstraction
   a. difficulty with abstractions, need concrete instruction
   b. input options suggest their archal progression

E. Reinforcement

1. Positive reinforcement defined by effect on behavior
   a. not every reward has intended effect on student performance
   b. certain consequences may have opposite effect

2. Potential reinforcers
   a. Primary-food
   b. concrete-prices
   c. token-points, stars
   d. activity-special privileges
   e. social attention
   f. intrinsic-challenge of learning

3. Grading
   a. form of token reinforcement
   b. implement system so all have fair access to better marks

4. Timing
   a. early stages of learning need continuous feedback
   b. some children need immediate feedback
   c. individualize reinforcement.

IV. Summary

A. Learning styles of student

1. adjust time schedule
2. adjust grouping arrangements
3. adapt physical placements
4. adapt modes of instruction
5. adjust reinforcement practices

B. Approach instructional variables systematically

C. Manage relevant variables to learner's advantage

VI. Overview Of One Linkage Approach

There will be three steps which will comprise the remainder of the workshop.

Make transparency of overview.

This is also contained within the participant's manual.

A. Identify student strengths from psychoeducational data. This will involve practice in construction of a display of strengths and weaknesses relative to mental age.

B. Identify teacher instructional and student responsive behaviors associated with student strengths. This will require communication with the professionals who administer the devices.

Emphasize the need to ask questions relative to the behavioral requirements of the tests and not relative to what the tests proport to measure.

C. EFFICIENTLY represent these strengths on the Individual Educational Plan. This will require the acceptance of the construct of the interactive model.

This is the shorthand representation system.

INSTRUCTION

CONTENT

VS

BEHAVIOR

Discuss Content vs Behavior

Refer to article by Cawley (1977) attached. Use transparency "Instruction Content vs Behavior."

VII. CONSTRUCTION OF A DISPLAY OF STRENGTHS AND WEAKNESSES

Utilize a transparency. The participant participant's manual contains three blank displays for practice purposes.

You may wish to use cases from your own files or may use the following examples:

Case: Joan P.

Grade: 5

Age: 11

Psychoeducational Data:

WISC; Full Scale 107 Verbal 114

Performance: 101 (Convert Subtests to Mental Ages)

Subtests:	Information: 11	(11.5)	Picture Completion: 11	(11.4)
	Comprehension: 10	(11)	Picture Arrangement: 9	(9.8)
	Arithmetic: 11	(11.5)	Block Design: 8	(8.7)
	Similarities: 12	(12.4)	Object Assembly: 10	(11)
	Vocabulary: 10	(11)	Coding: 7	(8.2)

WRAT: SPELLING Grade 3.4 (Convert to mental age: 8.4)

Math: Grade 3.1 (Convert to mental age: 8.1)

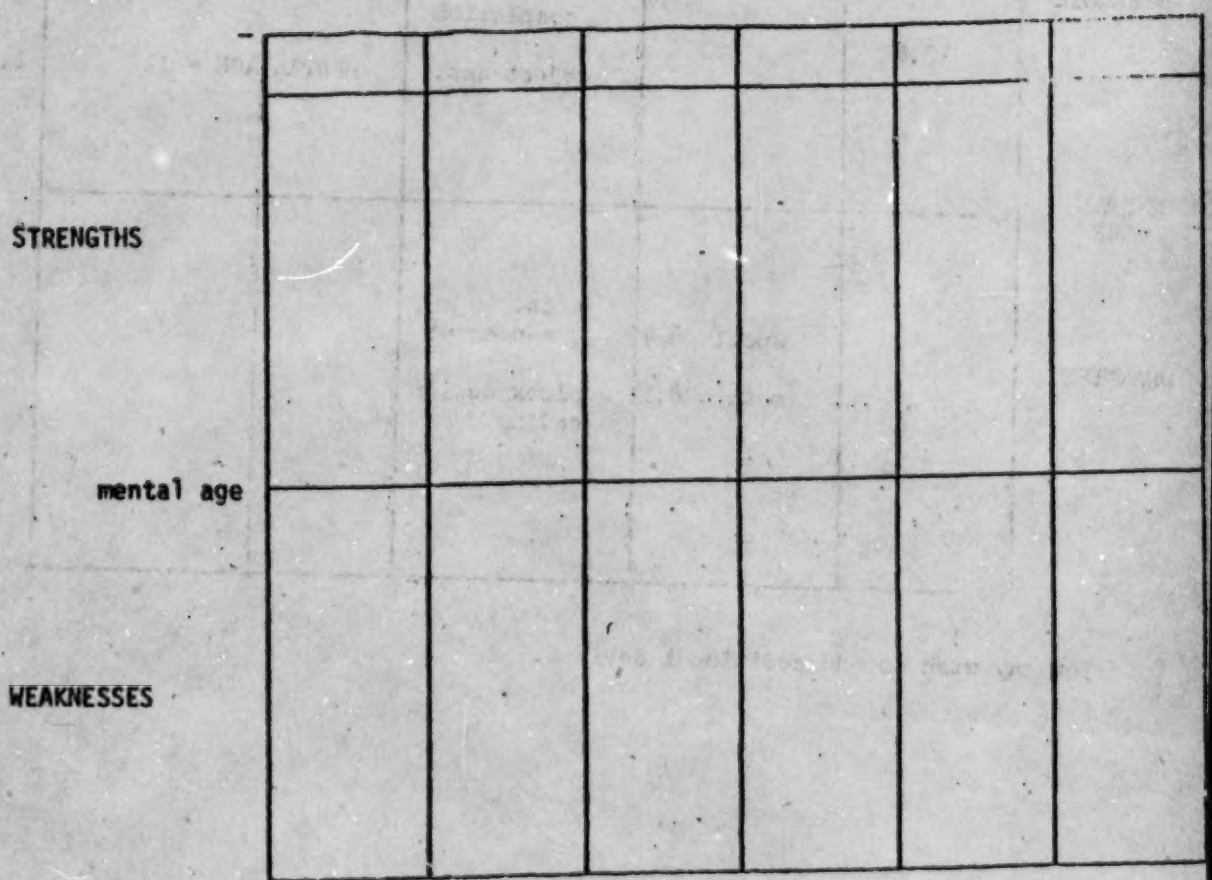
Peabody Picture Vocabulary Test: I.Q. 115 MA. 12.6

DISPLAY OF STRENGTHS AND WEAKNESSES

TEST	PPVT	WRAT	WISC-R			
STRENGTH	12.6		(all verbal subjects) picture completion object ass.	MENTAL AGE = 11		11
MENTAL AGE						
WEAKNESS		spell 8.4 math 8.1	pict. arrangement block design coding			

You may wish to add additional devices.

DISPLAY OF STRENGTHS AND WEAKNESSES



STEPS IN THE CONSTRUCTION OF A DISPLAY OF STENGTHS AND WEAKNESSES

1. Convert all scales, etc. into mental ages. This will provide a common frame of reference. The conversion scales for the WISC-R are contained on the last page of the WISC-R Instruction Manual.

It might be advisable for the teachers to request that the diagnosticians report all scores, etc., in mental age norms, as, well as, in the usual formats.

2. Place the subtests relative to the identified mental age.

3. This will lead to the identification of the strengths and weaknesses.

4. Identify the behavioral components associated with the strengths. This will require conversation with the diagnosticians relative to administration behaviors and student responses. (In the case example, it becomes readily apparent once this methodology is applied that the student is able to perform within normal limits if the presentation behavior is verbal and the response behavior is verbal. Once any response requires written or manual organized answer Joan P. experiences difficulty. Therefore, the teacher should be aware of instruction and examination requirements when evaluating Joan in areas other than writing.

CREATE EXAMPLES OF YOUR OWN

VIII. PRESENTATION OF THE INTERACTIVE MODEL

Utilize Cawley's paper (1977) "CONTENT OR BEHAVIOR."

The core of this conceptual process is the teacher presentation/ student response combination, which provides multiple options for teaching which is linked to identified student strengths. This is based on an instructional "INTERACTIVE MODEL" developed by Cawley, (1972). This PROCESS REGULAR interacts four types of teaching behaviors with four types of student responses which provides sixteen instructional combinations.

THIS IS ALSO CONTAINED WITHIN THE PARTICIPANTS MANUAL

USE TRANSPARENCY

It logically follows that through the identification of the intact presentation and response combinations, the regular classroom teacher can present curriculum with reasonable expectation of cognitive grasp by the student.

Refer first to the descriptions of the interactive behaviors on the next page. Then utilize interactive transparency.

Emphasize 16 different combinations.

THE INTERACTIVE MODEL

The four teaching inputs or presentation behaviors are:

1. GESTURE- This is the act of physically doing.
2. PRESENT- The displaying of fixed representations of pictures or objects
3. STATE- The giving of directions orally
4. GRAPHIC SYMBOLIC_ The writing of symbols (letters/numbers) or the drawing of pictures.

The four student outputs or response behaviors are:

1. GESTURE: This is the act of physically doing
2. IDENTIFY_ The act of pointing to or making nonsymbolic options in a multiple-choice test.
3. STATE- The giving of responses orally
4. GRAPHIC SYMBOLIC- The writing of symbols (Letters/numbers) or the drawing of pictures.

INTERACTIVE MODEL

PROCESS REGULATOR

TEACHER INPUT	STUDENT RESPONSE
GESTURE	GESTURE
PRESENT	IDENTIFY
STATE	STATE
GRAPHICALLY SYMBOLIC	GRAPHICALLY SYMBOLIZE

EXAMPLES OF INSTRUCITIONAL COMBINATIONS

STATE	GESTURE
STATE	IDENTIFY
GRAPHICALLY SYMBOLIZE	IDENTIFY
GESTURE	STATE
PRESENT	STATE

S / I P / S

STATE / IDENTIFY

IX. REPRESENTATION OF BEHAVIORAL COMPONENTS ON THE IEP

It now becomes evident that a method exists which provides for the linkage of the psychoeducational strengths directly to classroom instructional methodologies. All that remains is the representation of these methodologies in an efficient shorthand manner within the Individual Educational Plan(IEP) It is suggested that a separate line on the IEP be created which states; "Modifications of the Regular Classroom." On this line, the efficient representation can be utilized denoting input/output combinations. For example

USE transparencies

STATE/ IDENTIFY

It is possible to shorten this representation even further. The above example can be reduced.

WORKSHOP CLOSURE:

Review workshop objectives to assure that the purposes have been met.

Utilize transparency

ADMINISTER POSTTEST

Ask participants to write their name on the post-test, Collect.

X. POSTTEST

T F 1. An Individual Educational Plan is required only for those handicapped children who require special education.

T F 2. Mainstreaming is a legal requirement for all special education students.

T F 3. The Least Restrictive Environment means all handicapped students must attend the regular classroom for some part of the day.

T F 4. There is a distinct difference between mainstreaming and least restrictive environment.

T F 5. The Individual Educational Plan should contain a description of how the regular classroom will be modified to meet the needs of the handicapped student.

CONTENT OR BEHAVIOR:

an issue in the assessment of specific learning disabilities[1,2]

John F. Cawley
Professor of Education
University of Connecticut
May 1977

[1] Presented at the Conference on Assessment in Learning Disabilities, The Howard School, Inc., Atlanta, Georgia.

[2] Preparation of this paper was aided in part by a grant from the Bureau of Education for the Handicapped, USOE, Grant G007605223, Project No. 443CH60166, Learning Disabilities in Mathematics: A Curriculum Design for Upper Grades, John F. Cawley, Director, University of Connecticut, Storrs, Connecticut.

Special education has advanced to the point where it is proper to give extensive consideration and coverage to the matter of assessment as it relates to specific learning disabilities. Public Law 94-142, Section 504 of the Rehabilitation Act of 1973, the statutes and regulations of individual states, and the human concerns relative to individualism are all factors which are motivating the professional community to clarify and to improve its practices relative to assessment and specific learning disabilities. Substantive efforts are needed in this field because it is necessary to identify the individual with specific learning disabilities as being distinct from other categories of handicapping conditions due to the necessity of providing census data. These census data are used in matters that are primarily fiscally related.

Efforts are further needed because the results of assessment are to be a major component in the development of interventions. Prior to embarking upon the issue of assessment per se, it seems appropriate to highlight some of the factors which ought to influence the character and components of assessment. A few of these factors are:

1. The individual attends school on an all day basis.
2. Educational practices differ at preschool, elementary, and secondary levels.
3. Some 80% of the children with specific learning disabilities derive some 80% of their educational experience from general education.
4. Most of the curriculum and instructional experiences of general education are subject-matter oriented and, at the upper grade levels, these experiences are taught by subject-matter specialist.
5. Individuals vary in intra- and inter-individual traits and attributes
6. Individuals are referred for assessment by a wide range of personnel exhibiting varying degrees of competency and interest. Follow-up activites will be conducted by individuals who also

exhibit varying degrees of competency and interest.

7. Public Law 94-142 defines special education as "specially designed instruction."

If assessment is both the beginning and the long-term procedure through which the individual with specific learning disabilities is to be provided with special education, that is specially designed instruction, then models of assessment will have to be developed accordingly. In view of the fact that Ysseldyke's[1] paper deals with current issues in assessment, the present paper will focus upon a set of propositions relative to proposals that might be considered henceforth. The propositions to be presented relate to the factors listed previously.

Looking At Assessments

Assessment might be broadly divided into two separate sets of tactics and philosophies. One of these is the interview. During the interview, the individual is confronted with a series of tasks which are both norm-referenced and informal. Much of this is conducted using a battery of tests or procedures . Upon the completion of the interview(which may take place in more than one sitting and require more than one person) the tests are scored and analyzed. The results are conveyed to others prior to, or during, the meeting of the placement and planning team. A major assumption at this meeting is that all members of the team have some equivalent capability or resources to interpret the results in terms of a common set of perspectives.

Another approach to assessment is that of observation. Observation is the act of paying attention to or noticing pupil behaviors, social interactions, task performance (Reynolds, 1975) and other items of interest to the observer. Observations may be formal (a validated instrument is used)

[1] Ysseldyke, J. "Current Issues in the Assessment of Learning Disabled Children and Some Proposed Approaches to Appropriate Use of Assessment Information" in this volume.

or informal (the observer attends to selected factors without using a specific instrument.) Observation may focus upon one specific factor or a set of general factors.

Regardless of the tactic, the basic purpose of assessment is the attainment of data and information about the individual(s). These data will serve as an aid to describe the individual and/or to plan and intervene on his behalf.

Purposes and Strategies

The purposes of assessment have much in common, although there is considerable variability in tactic or strategy. Binet, for example, had a purpose which was to discriminate between those at one position of a continuum and those at another. Binet had a strategy. Binet's strategy consisted of mingling sets of tasks appropriate at one age level with sets of tasks which might be similar or different from tasks at another age level.

Wechsler has a purpose and a strategy. While the purpose of Wechsler was similar to that of Binet, his strategy was quite different. Whereas Binet attempted to differentiate among age levels by tasks as well as content, Wechsler held to the same tasks and modified content. That is, the task of the Information Test involves a situation in which the examiner states questions and the learner answers the question. The task is similar for a seven year old, a ten year old, or a thirteen year old.

While the category or label assigned to an individual might be the same in either case, the characteristics ascribed to the individual might differ substantially. Thus, the child with specific learning disabilities is likely to have those traits or attributes which are a function of the tasks and tactics used during the assessment.*

*See Ysseldyke for elaboration on this point

The matter is further complicated when class-based assessment, its nomenclature and constructs are used as factors in listing annual goals, short-term objectives and in describing the specially designed instruction which is special education. Class-based assessment is an approach which relates assessment to broad global categories. Class-based assessment does not distinguish one component of a category from others, even though the task and content might be different.

There is some uncertainty as to whether auditory discrimination--a class-based construct--is equivalently measured by the Auditory Discrimination Test (Wepman) and the Boston University Speech Discrimination Test. Both are class-based instruments. They both purport to measure a categorical construct.

The Auditory Discrimination Test requires at the very least that the successful performer listen to a pair of words and then signal the examiner that the pair of words sound alike or different. The Boston University Speech Discrimination Test requires that the successful performer listen to a word ("hat") and then point to a picture among a set of choices which corresponds to the stated word. The Peabody Picture Vocabulary Test involves fundamentally the same task requirements as the Boston University Speech Discrimination Test. Utilizing the same task requirements, the Boston University Speech Discrimination Test purports to assess auditory discrimination whereas the Peabody Picture Vocabulary Test purports to assess factors such as receptive language and intelligence.

Retracing the steps once more, note that two instruments using similar tactics purport to measure different constructs, whereas another combination of two different tactics purports to measure similar constructs.

This can be extended to other aspects of the assessment process when it is noted that Full Range Picture Vocabulary Test, the "Word Meaning Test" of

the Metropolitan Readiness Test, and the "Recognizing Common Words Test" of the Minnesota Test for Differential Diagnosis of Aphasia all utilize a common tactic--examiner says word/individual picks picture for word--as the tatic or process through which assessment takes place. All purport to measure different constructs. The variable on which each of these instruments tend to differentiate themselves is content and not method.

To illustrate, on of the problems with class-based nomenclature as it relates to describing individuals and to the development of instructional plans, consider The McCarthy Scales which contains a subtest, "Verbal Memory II." In this task the examiner states a sentance and the child orally repeats the sentence.

The Meeting Street Test contains a subtest, "Repeating Sentences." The task has the examiner state a sentence and the child orally repeats the sentence.

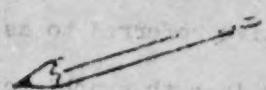
The task for both The McCarthy Scales and The Meeting Street Test is essentially the same; yet, during one of our in-service institutes it was noted that differential instructional plans were prepared for individuals on a basis of either or both tests. One instructional plan stressed "Verbal Memory" whereas the other stressed "Repeating Sentences." None of the 40 institute participants indicated awareness that the tasks were similar.

An effort was undertaken to reduce some of the variation among assessment devices with the development of the Behavior Resource Guide (Cawley, et al, 1973). The Behavior Resource Guide (BRG) is a manual which is built upon a type of behavioral objective referred to as a Desired Learner Outcome (DLO). Figure 1 contains two DLO's in both graphic and pictorial forms. The DLO is a three part sturcture consisting of an alpha-numeric code which serves as an organizer and retrieval device. The standard is the input. It is what the

Figure 1

DESIRED LEARNER OUTCOME (DLO)

CODE	STANDARD	LEARNER RESPONSE/ACTION
ARG-1	A WORD	IDENTIFY FROM AMONG TWO OR MORE CHOICES, THE PICTURE OR OBJECT WHICH REPRESENTS MEANINGFUL STANDARD
VAS-1	AN OBJECT OR PICTURE OF AN OBJECT	NAME OR DESCRIBE THE OBJECT

CODE	STANDARD	LEARNER RESPONSE/ACTION
ARG-1	'PENCIL'	
VAS-1		'PENCIL'

examiner or teacher (it could be a child) does in the task. The learner response is that task performed by the subject. Each DLO simply indicates what the examiner does and what the child does during the administration of the stem. No reference is made to content or to a hypothetical construct.

An examination of assessment deveices via the DLO makes obvious the notation that there is little task variability throughout the assessment instruments, although there is considerable content variation.(Figure 2 illustrates this point.) The eight subtests listed require the individual to listen to aurally stated words and then give a definition for each word. None of the words are the same. With respect to the behavioral or task aspect of the assessment, an examiner should be able to use any one of the instruments. However, with respect to the norms or clinical expectancies, the options are not as clear cut because each set of norms or clinical expectancies is a function of the content employed. It is, of course, content which is the major issue in test bias and the search for non-discriminatory assessment devices is a search specific to content. All aspects of our society are likely to accept the task--given a word/the individual can define the word--as reasonably acceptable to specific cultures. The substantive arguments relate to the choice of words and the protocol describing acceptable responses.

The matters of reliability and stability can also be considered within this present context. Is reliability a function of tactic or knowledge? Does the individual reliably display the same behavior only to change responses because of the acquisition or the forgetting of content? It has been this consistent tendency to ignore the differential roles of content and behavior (task) that makes it difficult to deal with many of the current issues in special education. Ysseldyke and Salvia (1974) have written that the controversy in educational diagnosis centers upon two models: The ability training approach and the task analysis approach. The issue is dealt with more recently by Smead(1977) who suggests that much work remains to be done

Figure 2

Behavioral Commonalities Among
Selected Assessment Instruments

Standard	Task	Learner Response
"An aural word"		States definition
Instruments		
Gates-McKillop		Oral Vocabulary
Minnesota Test for Differential Diagnosis of Aphasia		Defining Words
Petersen Test to Discover Potential Learning Difficulties in Children		Ability to give a definition
Pupil Record of Educational Behavior		Definitions of words
Stanford-Binet		Definitions
WISC		Vocabulary
WISC-R		Vocabulary
WPPSI		Vocabulary

with both approaches. In one response relative to this topic (Cawley, 1977), it was concluded that the so-called "ability training" studies had little or nothing to do with ability training. These studies were conducted with individuals who generally had the ability--that is, they could do the tasks--but what they really lacked was the content or knowledge which would have enabled them to get higher scores in the first place.

Those norm-referenced instruments that tend to dominate assessment practices are more likely to have impact upon measurement by virtue of the role played by content rather than behavior. The question to be asked is, "What is the learning disability in learning disabilities?" Does the focal point become one of "What is it that the individual cannot do?" or is it "What is it that the individual does not know?" It would seem to be a significant issue if our intent is to truly describe the individual in terms of specific content disabilities. Have we really seen the forest for the trees?

These questions relate back to some of the earlier efforts among the somatopsychologists, to distinguish between a handicap and a disability. To the somatopsychologist, a disability is seen as an impairment which has a clear cut objective basis, whereas a handicap is seen as an impairment resulting from socially imposed depictions or restrictions which impact upon the individual (Myerson, 1955; Wright, 1960.)

It is possible to view complete reading disability--that is, zero capability in reading as a disability. The disability is clearly objective--the individual cannot read; the individual is disabled. The same might not hold true when viewing the status of the individual with a grade level score equivalent to third-grade when the expected level for the individual is sixth-grade. Rather, it seems that the connotation handicapped is much more relevant because the status of the individual is described only in terms of arbitrary and somewhat artificial standards (New York Times, May 1, 1977.)

What learning disabilities characterize the third grade performer who, when administered the Reading Test of the Wide Range Achievement Test, obtains a raw score of 51 rather than a raw score of 64 in performing essentially the same task: Shown a word, say the word. In order to identify specific learning disabilities one would need to study the characteristics of each word in the sequence, determine the learning requirements of each, and develop a hierarchy based on learning complexity. It would then have to be made clear just what it is that the performer is able to do that the non-performer is unable to do. This is needed in order to differentiate the role of content (experience and familiarity with the material) or behavior (inability to perform the task even though the individual is familiar with the content.)

Does the Tail Wag the Dog?

The matter of assessment in the field of learning disabilities has reached a critical point in its development. Not only must the assessment be capable of differentiating individuals who are learning disabled from those who are not, but assessment must also be capable of providing data and information that will help to provide specially designed instruction. The latter is not a particularly recent proposition. Else Haeussermann (Haeussermann, 1958) stated that "the purpose of educational evaluation is to provide a basis for planning the educational program."

There are many forces which are attempting to influence the conceptual structure of learning disabilities. One of these forces is at the "grass roots" level. The "grass roots" forces seek efficiency and direction. At this level the conceptual structure of learning disabilities is a function of that which is presently operationalized, for that is what is assessed. New procedures for assessment tend to reflect an attempt to identify those traits which are already associated with the learning disabled child; subsequently,

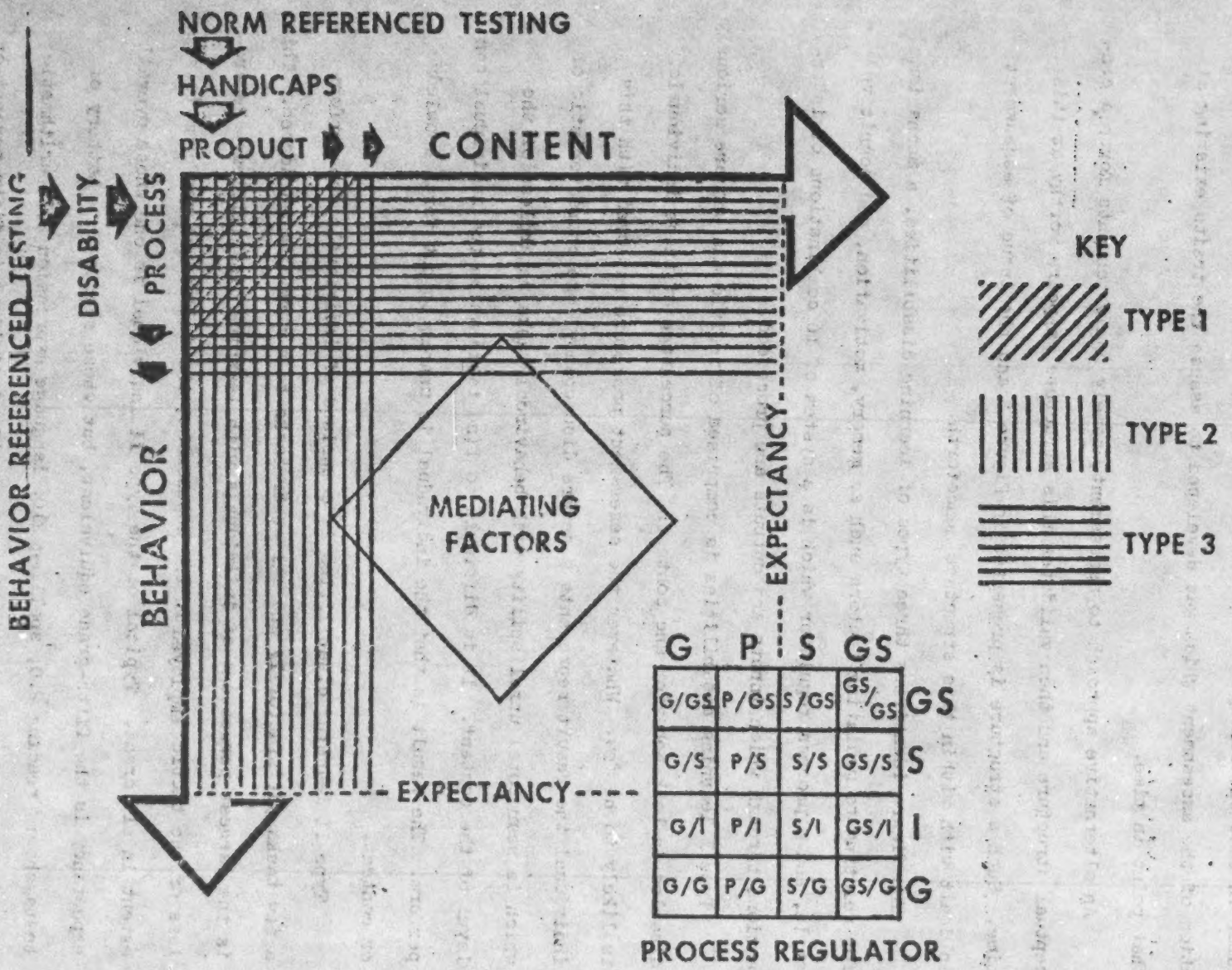
the child is described in terms of said traits. This approach becomes circular in that the conceptual structure of learning disabilities becomes a function of the assessment which was developed to assess the traits existing at that point in time.

An alternative approach to assessment, namely one which puts forth a conceptual structure and then validates this structure, appears worthy at this time. Such a structure is presented in Figure 3 and the issue of assessment is dealt with within this structure henceforth.

The figure identifies three types of learning disabilities, a mechanism for relating to mediating factors such as memory, motivation, and cognitive style, and a process regulator which is a system of 16 combinations of interactions through which inputs and outputs are processed.

Type I learning disabilities is comprised of individuals who are seriously disabled in both behavior and content. The percentage of these individuals is likely to be few. Whatever the assessment procedure employed with this individual the result represents a severe discrepancy, one characteristic of which is near total unreliability with behaviroal tasks regardless of the level of the content. It is difficult to find tasks which the individual can perform. The result is that the indivudual is unable to put forth knowledge or content.

Type II learning disabilities is comprised of individuals who perform a few tasks satisfactorily and all other tasks to a more limited degree. This is the largest percentage of individuals with learning disabilities. Regardless of the tactic employed in the assessment, the individual performs to some extent in all areas. Typical of the Type II individual is one whose overall expectancy is the fifth-grade equivalent, but whose scores on a battery of tests show: reading 2.0; spelling 210; language expression 2.3; arithmetic computation 2.4; and so forth. Althouth this individual is fifty percent or more discrepant, it is likely that this disabilities are more content than


NORM REFERENCED TESTING
HANDICAPS
PRODUCT
CONTENT
BEHAVIOR REFERENCED TESTING
DISABILITY
PROCESS
BEHAVIOR
MEDIATING FACTORS
EXPECTANCY
EXPECTANCY
KEY
TYPE 1
TYPE 2
TYPE 3
G P S GS
G/GS P/GS S/GS GS/GS GS
G/S P/S S/S GS/S S
G/I P/I S/I GS/I I
G/G P/G S/G GS/G G
PROCESS REGULATOR

behavioral. That is, when given a word to to spell, the individual spells the word. Those individuals do not spell or read as many words as others. These are individuals who are compared with a sample of individuals on norm-referenced measures.

Norm-referenced assessment is content based. The tactic used to assess the learner generally remains constant throughout each segment of assessment. This is the individual who was frequently the target of "ability training." The limitation is mainly in content. It is because of content that norm-referenced strategies produce handicaps, the artificial discrepancies between an individual and a sample. Type II is a product related phenomenon.

Type III learning disabilities is comprised of individuals who perform some tasks exceedingly well. These individuals do not perform at all in other tasks. An illustration of this is the 12 year old with listening comprehension equivalent to the seventh grade level and reading comprehension at the primer level. The disability is clear and concise. The individual cannot read at all. There is total disability in certain behavioral areas and competence in others.

Behavior-referenced assessment holds constant a set of content, and systematically varies behavioral tactics across this content. This is the process related phenomenon. As has been described elsewhere (Cawley, 1977) it does not seem reasonable to expect that assessment procedures which allow for simultaneous changes in both content and behavior will be capable of identifying specific learning disabilities.

Content or Behavior

Current assessment instruments and tactics vary both content and behavior. This is true for instruments such as the WISC-R, wherein each subtest not only includes a tactic which is different from every other subtest, but each subtest includes content that is different from every other

subtest. This combination exists for the ITPA, Gates-McKillop, the Detroit Test of Learning Aptitude, and the great majority of other multiple subtest instruments.

The use of devices such as those listed above makes it difficult to identify specific learning disabilities because one is never certain if performance is a function of behavior or content.

Put directly, it seems inappropriate to assess specific learning disabilities when both content and behavior vary simultaneously. Accordingly it is proposed that:

> The assessment of specific learning disabilities be undertaken via procedures that hold content constant and vary only behavior.
>
> The assessment of content capabilities and achivement be undertaken via procedures that hold behavior constant and vary only content.

The instructional propositions which logically follow are:

> Efforts to remediate process or behavioral deficits should take place with content with which the individual is familiar.
>
> Efforts to facilitate content growth should utilize processes or behaviors in which the individual is intact.

Figure 4 lists a sequence of tasks relating to the topic of magnets. Each task is described in terms of the behavior of the examiner or teacher and the behavior of the indivdual being assessed or taught. Adjacent to each behavior is the name of an assessment device which uses this behavior, but not the content. What would be the net effect of the assessment of learning disabilities assessed independent of the influence of content?

Figure 5 lists a sequence of tasks in which the behavior is held constant and the content allowed to vary. Behavioral capability within a situation in which content changes is an essential consideration in the education of

Figure 4

Illustrating Content Constancy and Behavioral Change: MAGNETS

Examiner Behavior	Subject Behavior	Assessment Device
Says word "magnet"	Identifies from among four pictures the picture of a magnet	Peabody Picture Vocabulary Test
Shows picture of magnet	Names or describes the object	ITPA: Verbal Expression
Says word "magnet"	Says definition	WISC: Vocabulary
Shows written word "magnet"	Says word "magnet"	WRAT: Reading
Says word "magnet"	Writes word	WRAT: Spelling
Shows written word "magnet"	Writes word by copying	Slingerland: Word Copy

Figure 5

Illustrating Behavioral Constancy and Content Change: Vocabulary

Task	Word	Context
I		
E: Says Word	"Strike"	To miss a thrown ball
S: Gives oral definition for word		To strike a match
		To find (such as oil, gold)
		To impress
		To produce coins
II.		
E: Says word	"heart"	Organ of body
S: Gives oral definition for word		Feeling or capacity for sympathy
		Innermost part of something
		Suit in cards
		Spirit, courage

children with learning disabilities. The individual who attends school all day experiences much more variability in content than in behavior, particularly at the upper grade levels. If the individual manifests the behavior, in this case defining words, this behavior can be utilized in many curricular areas throughout the entire day. Mainstream is a system of curriculum or content in which the youngster with specfic learning disabilities is likely to spend some 80% of his time. Mainstream is a content-based system of education where language arts, geography, science, and other subject matter-based activities predominate. Mainstream is a system of education in which the dominant framework of child development presupposes the existence of the intact learner. The developmental framework of Mainstream is such that it assumes that each learner is characterized by an intact developmental pattern. The growth of the individual is expected to show near equivalent attainment in all developmental areas. Yet, by definition, individuals with specific learning disabilities are individuals who do not develop in all areas on an intact basis.

It is essential that the assessment acquire some data and information which can be transmitted to those teachers who work with the learner during the 80% of time that special education is not providing direct instructional services. The individual who cannot read in "reading" cannot read in science. Karlin (1973) emphasizes another aspect of the assessment problem by noting that the grade equivalent that a test assigns to an individual's performance is usually higher than the publisher's grade level designation of instructional materials. There is an even greater discrepancy between the level designated by the test and the level of reading in subject matter material.

It is necessary to determine areas of capability and to relate these to the subject matter experience in order that the individual acquires as great a range of knowledge and concepts as possible. Secion 504 of the Rehabilitation Act of 1973 states that course examinations at the post-secondary level

cannot be administered to an individual in such a way that selected handicapping conditions interfere with the individual's performance in the area being assessed. I interpret this to mean that a reading-based science test cannot be given to an individual who cannot read in order to test science. If this is so at the post-secondary level as Section 504 indicates, is it any less a relevant issue for the individual in third, sixth, or twelfth grade? The problem is likely to be more acute at the secondary level because there is less selectivity in enrollment. Why should a youngster who cannot read fail science simply because the science test required the individual to read?

The Process Regulator[1]

The Process Regulator, Figure 3, the 16 combinations of input-output interaction, is an organizer in the assessment-instructional system. The Process Regulator is a combination of five relatively simple behavioral organizers which enables one to categorize selected tasks in the input-output exhange. These behaviors are:

Gesture(G): All movements, expressions, or actions which convey a message or a response to a message. Both input and output can use gesture.

[1] Cawley, J.F. "The Process Regulator" in Meeting the Learning and Behavioral Needs of Handicapped Children Via a Subject-Matter Emphasis. Portland, Maine. Psychoeducational Associates, Inc., 1977.

Present (P): The use of fixed displays of 3-dimensional objects or the use of pictures. Present is an input behavior only.

Identify (I): The act of pointing or marking a set of objects or pictures to designate a selection of an option in a situation which involves two or more choices. Identify is an output behavior only.

State(S): Aural statements in which the input conveys a message to the ear. The state output behavior is oral.

Graphic Symbolic(GS): Any and all uses of letters, words, numerals, or specialized symbols in printed form.

In his paper, Ysseldyke (1977) raised the issue of "fairness" in testing. It seems relevant to raise the issue again, although from a different perspective. The concept of fairness as expanded upon herein suggests that the assessment contain a reasonable representation of all 16 combinations in order that the individual be offered an opportunity to display combinations of input against combinations of output. Such a test battery might resemble that contained in Figure 6. An effort is made to balance the combinations of input and output, and the compilation of a battery to achieve this goal is possible. The result is that specific deficits are highlighted and the subject matter teacher can be directed away from these deficits while maintaining a capability to provide instructional alternatives in curriculum. The special educator can design a program of specifically designed instruction to ameliorate deficiencies while working within a broad behavioral organizer.

An alternative to the formal interview strategy, in which selected

Figure 6

Selected Illustrations Between
Process Regulator and Assessment Instruments

Process Regulator			
Input	Output	Task	Assessment Instrument
GS	GS	Copies printed words	Slingerland: Copy I
GS	S	States names of printed words	WRAT: Reading
GS	I	Identifies picture Corresponding to printed words	Diagnostic Skills Battery: Level 12, Form B
GS	G	Follows written directions	
S	GS	Writes a stated word	WRAT: Spelling
S	S	Repeats set of stated words	Detroit: Auditory Attention for Unrelated Words
S	I	Picks picture for stated words	Peabody Picture Vocabulary Test
S	G	Follow stated directions	Pupil Record of Educational Behavior: Follows Oral Directions

tests are organized within the process regulator, is to employ a direct classroom analysis of individual performance. During observation the 16 combinations of the process regulator are informally dealt with over a specific content area. (See Figure 7).

The illustration with the toothbrush represents one level of content and one set of tasks across that content. The tasks could be expanded upon while holding the content and process regulator combinations constant by varying the actual task requirements. Assuming the individual demonstrated adequacy with the graphic symbolic combinations, other graphic tasks can be integrated into the instructional activities. Such a sequence might include:

E: Shows written word "toothbrush	S: Copies word
E: Shows written word "toothbrush"	S: Writes word in sentence
E: Shows written word "toothbrush"	S: Encircle word each time it appears in paragraph
E: Shows written word "toothbrush"	S: Writes two separate words

There are no specific limitations with respect to either task, task complexity, or content in the process regulator. Project MATH[1], a comprehensive curriculum and instructional program for children with handicaps to learning, uses a system similar to the process regulator. This system enables a teacher to provide instruction in each mathematical concept while using up to sixteen combinations. Thus, the child with graphic symbolic limitations is not restricted in-mathematics because the mathematics concepts can be represented or illustrated with other combinations.

[1]"A Program Project Research and Demonstration Effort in Arithmetic Among the Mentally Handicapped," OEG-70-2250(607) #162008, Bureau of Education for the Handicapped, USOE, Washington, D.C.

Figure 7

Process Regulator Assessment Over One Content Area: Toothbrush[1]

Input	Output	Learner Reaction
E: Gestures use of toothbrush	S: Gestures use of toothbrush	
E: Gestures use of toothbrush	S: Identifies picture of object appropriate to gesture	
E: Gestures use of toothbrush	S: States name of object being gestured	
E: Gestures use of toothbrush	S: -------	"I can't write it."
E: States name of object "toothbrush"	S: Gestures use of toothbrush	
E: States name of object "toothbrush"	S: Identifies picture of toothbrush	
E: States name of object "toothbrush"	S: States definition	
E: States name of object "toothbrush"	S: ------	
E: Presents picture of toothbrush	S: Gestures use of toothbrush	
E: Presents picture of toothbrush	S: Identifies picture of toothbrush	
E: Presents picture of toothbrush	S: States name or description of toothbrush	
E: Shows word "toothbrush" written on card	S: ------	"I can't read."

Other tasks eliminated due to graphic symbolic limitations.

[1]Taken from the actual administration to one 7-year old child. Examiner: Louise Cawley

The Behavior Skills Inventory

The Behavior Skills Inventory (Cawley, et al, 1976) is one procedure which serves as the basis for an assessment of specific learning disabilities. The purpose of the BSI is to permit an examiner or group of examiners (including teachers) to compile an assessment device that is culturally adaptable. It assesses learning disabilities using a set of content that is specific to a curriculum or indigenous to the learner.

The BSI is largely open-ended with respect to content. The staff actually selects the content from material familiar to the learners in a particular school or region. Once a set of content has been decided upon, each item in the BSI is constructed using the same basic content. The Level II BSI contains 53 items, three of which are illustrated in Figure 8. The task in item A requires the individual to read a printed word and state the word. The content varies at each grade level. This is a standard procedure for assessing word recognition in isolation. Item B requires that the child listen to a word and then write the word. This is typically referred to as spelling. Item C requires that the child listen to a word and then state an oral definition for the word. This is the typical vocabulary task.

The generalizability of the BSI is limited because its content is specific to a school, region or cultural group. Therefore, if one were to pose the question, "How do individuals in one community compare with those in another?" either the BSI would have to be administered to both samples or a norm-referenced measure would have to be employed. Each item on the BSI is coded to the desired learner outcomes in the Behavior Resource Guide. Thus, one could go to the Behavior Resource Guide to select a norm-referenced device which uses the same task. (See Figure 2.)

The limited generalizability of the BSI is a significant issue. Similarly, the overgeneralizability of norm-referenced measures may be an

equivalent issue. Take, for example, the case of the child with specific learning disabilities who spends one hour per day in the resource room, and four hours per day in Mainstream. His present level of functioning is 2.0 as indicated by a raw score of 38 on the Reading Test of the WRAT. Yet, what this individual has to face during the day is likely to be dominated by items such as those presented in Figure 8. The individual cannot be dealt with at the 2.0 level in the resource room and then dealt with at the 4.0 level in social studies if reading is required. It might be shown, however, that while the individual is limited with items A and B in Figure 8, this same individual might do very well on item C. A discrepancy between the tasks in item C and those in item A and B would seem to be more of a true indicator of specific learning disabilities than if both content and task varied.

Summary

The literature in psychology and education typically defines learning in relation to performance or changes in performance characteristics. Experimentation in learning generally focuses upon a specific task or set of tasks which have some meaning in relation to one another. The one thing that is characteristic of research in learning is the attempt to control as many variables as possible. Unlike the classroom, the laboratory setting is conducive to research because of the capability to exert controls. However, the classroom can control more variables than it does. Until it does this, the education of children with specific learning disabilities will remain in a state of confusion and excessive divergency.

The primary focus of this paper has been on the issue of variable control. Assessment in the field of learning disabilities must begin to excercise greater control over its parameters. One approach to control is to distinguish between content, or what the individual knows, and behavior, what tasks the

individual performs or fails to perform. This distinction is needed in order to adequately plan instruction on an all day basis. It is necessary in order that the learning disabled child attain his maximum potential.

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IEP'S: THE STATE OF THE ART - 1978*

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IEP'S: THE STATE OF THE ART - 1978

ABSTRACT

In recent years, the passage of federal (Public Law 93-380, Section 504 of the Rehabilitation Act of 1973 and Public Law 94-142) and state legislation has provided special education professionals with a legal basis for providing all handicapped children with a free and appropriate education. The most recent of these laws, The Education for All Handicapped Children Act of 1975 (P.L. 94-142), stipulates that each state and local educational agency must provide each child receiving special education with an Individualized Educational Program (IEP). The particular substance of this mandate to meet the unique needs of the individual child rests in the condition that each school system is required to develop a plan, which being special, actually benefits the child (Owens, 1977). A close examination of P.L. 94-142 reveals that, while it is directed that each child receiving special education must be provided with an IEP, there is no direction in the directive regarding the methodologies for the development of the IEP.

One uncertainty surrounding the usage of the IEP focuses upon the issue of management versus instruction. Viewed by some advocates as an administrative tool, the IEP is designated to be the vehicle by which the overall management of the instructional setting is delineated. Viewed in this format, the IEP has no relation to instruction. Yet, special education is defined in P.L. 94-142 [Section 4(a)(19)] as "...the provision of specially designed instruction..." While diagnostic terms may implicate a certain management technique, the specific learning needs of an individual are not inherently apparent in a label. To assume that children with identical diagnostic labels require the same type of instruction is to deny the importance of

uniqueness among all individuals. Instruction refers to the act of teaching, not management, (Cawley, 1977) and, as such, must be specially designed to meet the unique learning needs of the individual. Pertinent to this issue, assessment, which allows the unique learning needs of the individual to surface, must be linked to instruction (Ysseldyke & Salvia, 1978) in order that instructional alternatives designed to meet learning needs can be developed.

Placement within a resource room further accentuates the need for provision of instructional alternatives. The child who exhibits a reading problem within the resource room does not leave the problem within the confines of that room. Rather, the child carries the deficit into all subject areas. Thus, all teachers involved with the student must be provided with alternative instructional methods and materials by which the unique needs of the learner can best be met. Placement within a special education setting, that is managment of the learner, does not lend itself to meeting the unique needs of the learner. Therefore, if specially designed instruction is not a component of the IEP, how and where are the unique needs of the individual met?

The express purpose of the IEP, to deal effectively with individual differences, is to be accomplished through the development and implementation of an educational program that takes into account the individual's strengths and weaknesses. In order to develop an IEP that truly represents the unique needs of the child, it is important to have appropriate assessment data which indicate not only strengths and weaknesses, but also the current levels of performance (Hayes, 1977). With knowledge of these elements, it is possible to develop and implement long-term goals and short-term instructional objectives.

The current emphasis on the need to synthesize the diagnostic information into the educational program leads one to question the current status of IEP development since by law, Individualized Educational Programs, should now exist. Therefore, the primary purpose of this investigation was to investigate the current state of the art in IEP development.

Results of this investigation which examined 300 IEP's and corresponding psychoeducational assessments revealed that there are serious needs that must be addressed by the field of special education. Foremost among these needs is the refinement of the diagnostic/instructional link.

INTRODUCTION

The Education for All Handicapped Children Act of 1975 (P.L. 94-142) stipulates that state and local educational agencies must provide an Individual Educational Program (IEP) for all handicapped children requiring special education. Owens (1975) has pointed out that the substance of this mandate to meet the unique needs of the individual rests in the condition that each school system is required to develop a program which actually benefits the individual. Minimum requirements regarding the content of the IEP, that is (1) assessment; (2) goals and objectives; (3) evaluation and review procedures, have been established. Still, P.L. 94-142 offers little guidance in the synthesis of this information into an IEP. As Cawley (1975) has suggested, the potential for confusion, problems of communication, and a generalized inefficiency in the diagnostic/instructional linkage exists when there are so many possible alternatives in the diagnostic assessment and an even greater number of alternatives with respect to the educational program. In fact, Schenck (1979) has found that the long-term goals and short-term instructional objectives of IEP's have limited foundation in the psychoeducational assessment.

The current emphasis on the need to synthesize the segments of information into an IEP leads one to question the current status of IEP development. What do individual education programs currently look like? What is the present character of the format for individual education program development? It was towards these two questions that this study was directed.

METHODS

Population

Three hundred Individual Education Programs and corresponding psychoeducational assessments were collected from the files of children who had been identified as Educable Mentally Retarded (EMR), Emotionally Disturbed (ED), Learning Disabled (LD) and Other (meaning no diagnostic label was available although the child received special education services). The IEP's and corresponding psychoeducational assessments were randomly selected with regard to handicapping condition and age level. Data were collected from 37 towns and cities in the state of Connecticut.

Procedures

Short-term instructional objectives and test grade equivalent scores were collected from the IEP's of the children identified as LD, ED and EMR. Information relative to required components of the IEP were collected. This information included present levels of performance, long-term goals and short-term instructional objectives, related educational services, time to be spent in regular education and special education, initiation and duration dates, evaluation methods and evidence of parental approval. Furthermore, data were also collected relative to the positions of the participants in the formulation of the Individualized Educational Program. Additional data collected concerned the type and number of tests utilized across the handicapping conditions of EMR, ED and LD.

Statistical Analysis

A series of frequency distributions were performed on the data obtained from the IEP's and corresponding psychoeducational assessments.

RESULTS

A frequency distribution was performed in order to determine the extent to which required IEP components were actually contained in the programs examined. A total of 64% of the cases examined did not report current level(s) of performance. Absence of this data from over half of the IEP's raises serious questions regarding the subsequent development of long-term goals and short-term instructional objectives. Twenty percent (20%) of the cases did not reveal goals and/or objectives while 18% of the IEP's had no statement specific to related educational services. Regarding amount of time to be spent in regular education, 68% of the IEP's were missing this data. Thirty-seven percent (37%) of the cases did not report the amount of time to be spent in special education classes. Thirty percent of the cases did not report initiation and/or duration dates for the IEP while 33% did not report evaluation procedures. Evidence of parental approval was missing in a total of 57% of the cases. Table 1 contains the summary data for this frequency distribution.

Table 1 about here

Evidence of school personnel involved in the formulation of the Individual Education Program is displayed in Table 2. Examination of these results reveals that in only 15% of the cases the referring teacher was involved in the development of the IEP while the receiving teacher (that is, the special education teacher and in most cases this was a resource room teacher) was present in 45% of the cases. Parental involvement was evidenced in an extremely small percentage of the cases (26%) as was the involvement of the school psychologist (26%). These data are contained in Table 2.

TABLE 1

EVIDENCE OF MISSING DATA IN IEP'S

	1	2	3	4		5	6	7
	Present Levels	Objectives/ Goals	Educational Services	Regular Class Participating	Sp. Class Part.	Initiation and Duration Dates	Evaluation	Parental Approval
YES								
Present Number of Cases	108	240	246	97	189	211	201	128
Percentage	36%	80%	82%	32%	63%	70%	67%	43%
NO								
Missing Number of Cases	192	60	54	203	111	89	99	172
Percentage	64%	20%	18%	68%	37%	30%	33%	57%
TOTAL Number of Cases	300	300	300	300	300	300	300	300

Table 2 about here

A frequency distribution was performed in order to determine the number of IEP's within the three categories of LD, ED and EMR that contained evidence of reading and/or math objectives. Numbers of cases evidencing assessed needs in the areas of reading and/or math for each of the three categories (LD, ED, EMR) were determined through frequency distributions.

Table 3 and 4 about here

In all three categories, the number of cases containing reading or math objectives exceeds the number of cases revealing assessed reading or math needs. Tables 3 and 4 illustrate these data. The overabundance of cases with objectives and no reported assessment negates the premise of the diagnostic/instructional link.

Table 5 illustrates the frequency of intelligence, perceptual motor, projective and achievement tests across handicapping condition. The learning disabled population were administered a wider variety of evaluation instruments than any other handicapping condition. This is most probably a function of the diagnostic procedure which determines learning disabilities by exclusion of other handicapping conditions. The ramifications of the usage

Table 5 about here

of a multitude of assessment devices within the learning disabilities category is reflected in the greater frequency of objectives for this

TABLE 2

SCHOOL PERSONNEL INVOLVED IN
FORMULATION OF INDIVIDUAL EDUCATIONAL PLANS*

Position	Number Involved	[%]	Missing Data	[%]
Principal	80	27	220	73
Referring Teacher	45	15	225	85
Receiving Teacher (Sp. Ed. Teacher)	135	45	165	55
Parent	77	26	223	74
Psychologist	77	26	223	74
Subject Area Teachers	34	11	266	89
Other**	81	27	219	73
Child	1	3	299	99.7

*In 26 instances the LEA's removed the names and positions of those involved in the formulation of the IEP. The totals under the Involved and Missing Data columns, therefore, can only be regarded as approximate.

**Other: Assistant Principals, Speech Therapists, Special Education Directors and Assistant Directors, Nurses.

TABLE 3

EVIDENCE OF DIAGNOSIS (MATH) BY
OBJECTIVES ACROSS HANDICAPPING CONDITIONS

	Evidence of Math Diagnosis # of cases	Evidence of Math Objectives # of cases
LD	29	118
ED	3	10
EMR	0	17

TABLE 4

EVIDENCE OF DIAGNOSIS (READING) BY
OBJECTIVES ACROSS HANDICAPPING CONDITIONS

	Evidence of Reading Diagnosis	Evidence of Reading Objectives
	# of cases	# of cases
LD	39	71
ED	5	14
EMR	1	15

TABLE 5

TESTS UTILIZED TO DETERMINE HANDICAPPING CONDITIONS

	LD (186)	ED (29)	EMR (28)	TOTAL (243)
IQ Tests				
WISC	9	2	2	13
WISC-R	74	10	12	96
PPVT	29	5	5	39
Binet	7	2	3	12
Other	27	5	2	34
Perceptual-Motor Tests				
Purdue	2	--	--	2
Bender-Gestalt	65	10	12	87
Frostig	6	--	--	6
Beery	22	2	--	24
Benton	4	--	1	5
Harris	--	--	--	0
Other	21	1	3	25
Projective Tests				
House-Tree-Person	15	4	1	20
Draw a Man	14	3	2	19
T.A.T.	11	4	1	16
C.A.T.	1	2	--	3
Rorschach	6	3	--	9
Sentence Completion	26	6	1	33
Other	42	12	8	62
Psycholinguistic Tests				
I.T.P.A.	23	1	--	24
Parsons	1	1	--	2
Psycholinguistics	--	1	--	1
Other	27	2	1	30

TABLE 5 (Cont.)

	LD (186)	ED (29)	EMR (28)	TOTAL (243)
Achievement Tests				
WRAT	59	6	8	73
Iowa	1	--	--	1
Stanford	--	1	--	1
SRA	--	--	--	0
Peabody	33	4	3	40
Other	3	3	1	7

population. A need to assess other handicapping conditions with the same test battery received by learning disabled children is indicated.

DISCUSSION

The Education for All Handicapped Children Act of 1975 (P.L. 94-142) does not stand alone in its advocacy for the rights of all handicapped children. Rather, it is the most recent in a line of legislative decisions designed to provide the rights of handicapped children (P.L. 89-10; P.L. 89-313; P.L. 89-750; P.L. 91-230; P.L. 93-380 and P.L. 93-112). A long-held goal of special educators, individualized education, had not been mandated prior to the passage of Public Law 94-142. The requirement with P.L. 94-142 that all children receiving special education receive an individualized education program (IEP) designed to meet their unique needs had been the subject of various articles during recent years (Johnson, 1967; Reger et.al., 1968; Eisele, 1971; Hammill, 1971; Herrick, 1972; Cartwright et.al., 1973; Ysseldyke, 1973; Gallagher, 1974; Rojow & David, 1974). Of more recent examination has been the extent to which long-term goals and short-term instructional objectives of the IEP are predicated upon the psychoeducational assessment (Schenck, 1979).

According to the law, the IEP must contain statements which detail a child's (1) current level of performance; (2) annual goals inclusive of short-term instructional objectives; (3) specific educational services to be provided; (4) amount of time to be spent in regular education; (5) initiation and duration of services; (6) appropriate criteria and evaluation procedures; (7) a schedule for determining if objectives have been met on annual basis at the least. In order to individualize instruction for handicapped children, resources are required to aid in the identification of each child's strengths

and weaknesses, to determine sequences of instructional objectives for each child and to provide the content of instruction (Olsen, 1976). A sound diagnostic evaluation must result in information, as stated by Gotts (1976), that provides: (1) a clear understanding of the child's level of functioning in various developmental areas, as well as, (2) an understanding of deficit areas that require attention. It is from the diagnostic evaluation that the individualized education program is developed.

The results of this investigation into the state of the art in IEP development have raised questions which must be attended to in the future.

A significant number of cases reveal missing data specific to the requirements of P.L. 94-142. This apparent confusion on the part of those individuals involved in the development of IEP's can only serve to hinder the provision of specially designed instruction as special education is defined within the law [Section 4(a)(19)]. Even more important to the provision of specially designed instruction is the relative lack of linkage between assessed needs and development of objectives. If special education is to be that instruction developed to meet the unique needs of the individual as evidenced through assessment, than the diagnostic/instructional link must be apparent. Such was not the case in this investigation. The inability to trace goals and objectives back to diagnostic data raises serious doubts concerning the efficacy of the content of the educational programs. Schenck (1979) has conducted an in-depth investigation into this area. Her findings indicate that there is a need to re-examine the concept of special education.

The responsibility for such a situation does not lie within any one profession (i.e., psychologists, educators). Rather, it is a combined problem. Lack of communication between psychologists and educators is a major contributing factor towards the existence of this problem. Likewise, lack of

training on the part of both professions in the relating of diagnostic data to instruction is a contributing factor.

Tied to the diagnostic/instructional link is the degree to which the IEP's addressed the "all-day" needs of the individual. As Cawley (1977) has so aptly stated, a child is in school 6 hours a day, 5 days a week, for 12-14 years. With the current emphasis upon mainstreaming occurring in a majority of school districts, this fact takes on a great deal of importance. The findings of this investigation revealed that while 61% of the students were placed in resource rooms only 32% of the IEP's stated the amount of time to be spent in the regular education sector. And, none of the cases examined delineated goals, objectives or instructional strategies to be employed by the regular educator.

Indeed, it appears that there exists a "thirty-minute learning disability." Lack of instructional strategies, goals and objectives for the regular classroom educator further accentuates this point. The sole focusing upon an individual's problem(s) when in a special education setting negates the undeniable truth that all children are in school 6 hours a day, 5 days a week for approximately 12-14 years (Cawley, 1977). As such, learning problems must be addressed not only during the time the child spends within the special education sector, but also during the vast amount of time spent in the regular education sector. Or, are we to assume that the unique needs of a child begin and end within the confines of the resource room? These authors would dare to propose the idea that a child who exhibits a reading problem in the resource room also demonstrates that problem in science, social studies, mathematics and the host of other academic areas that individual is exposed to during the course of an academic career. Therefore, alternate instructional strategies must be provided in order that the student may

engage in learning science, mathematics, social studies, etc. without the disability area (e.g., reading) interfering. The exclusion of alternate instructional methodologies, goals, and objectives to be utilized by the regular educator also denies the need for guidance and aid that must be provided to the regular educator.

The results of this investigation clearly delineates a need for inservice training in two areas specific to individual educational programs. First, clarification regarding the content necessary for IEP development must be emphasized. Training in the process of relating diagnostic information into an appropriate educational program must be undertaken in order to meet, not only unique learning needs, but also the "all-day" needs of the individual. Steps taken to address these needs will assure that we are attempting to provide all children with special needs the best education possible.

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